

ABSTRACT

A surgical-medical dressing is described which uniquely uses a sandwich of two extracellular matrices grown on a composite composed of gelatin-fibronectin- heparan sulfate.

The culture medium used to grow the two cell types (dermal fibroblasts and dermal microvascular endothelial cells forming the second extracellular matrix) is the conditioned medium (CM) obtained from human umbilical endothelial cells used to form the first extracellular matrix.

All cells in tissue culture are detached using 5mM EDTA leaving their secreted acellular matrix behind and intact.

This CM can also neutralize the enzyme DISPASE commercially used to detach cultured epithelial sheets ('Cultured epithelial autografts' (CEAs)) from the matrix on which the human epidermal cells, forming the sheets are grown. CEAs are clinically used in wound and burn management.